IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

_____)	
AMPEX CORPORATION,)	
)	
Plaintiff,)	C.A. No. 04-1373 (KAJ)
)	
v.)	
)	
EASTMAN KODAK COMPANY,)	
ALTEK CORPORATION, and CHINON)	
INDUSTRIES, INC.)	
)	
Defendants.)	
_____)	

AMPEX'S OPPOSITION TO DEFENDANTS' MOTION
FOR SUMMARY JUDGMENT OF INEQUITABLE CONDUCT

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I.   NATURE AND STAGE OF THE PROCEEDINGS

Fact and expert discovery closed, with the exception of certain discovery relating to willful infringement, on February 28, 2006 and May 12, 2006, respectively. A combination claim construction and summary judgment hearing is scheduled for July 13, 2006. Trial is scheduled for December 14, 2006. Defendants seek summary judgment of inequitable conduct, and Ampex opposes.

The inequitable conduct allegations on which Defendants' motion is based are new. They do not appear in Defendants' pleadings or in their responses to contention interrogatories. Ampex was not notified of the basis for Defendants' theory until being served with a supplemental expert report served after the report deadline passed, followed by the present motion. Defendants apparently attempt to justify the addition of their new theory on their April 4, 2006 deposition of Dan Beaulier, the inventor of the '121 patent.

II.   SUMMARY OF ARGUMENT

Defendants' motion for summary judgment is based, in its entirety, on a misquotation of the prosecution history. Defendants changed a quote that was addressed to the specific characteristics of a single prior art reference into an all-encompassing statement about the entire prior art. All of Defendants' arguments on the issues of materiality, knowledge, and intent are based on a statement Ampex never made.

In addition to mischaracterizing the evidence, Defendants put forth no proof at all that the "direct transfer" information Defendants claim should have been disclosed to the Patent Office was not cumulative to the art already cited. Cumulative information is not material. Thus, Defendants do not even make out a prima facie case of inequitable conduct. If summary judgment is appropriate, it should be in favor of Ampex. (*See* Ampex Corporation's Motion For Summary Judgment That U.S. Patent No. 4,821,121 Is Not Unenforceable Due to Alleged

Inequitable Conduct For Failure To Disclose The Quantel DLS6000, Quantel PaintBox, Or

Ampex AVA Systems (D.I. 283).)

III.   **STATEMENT OF FACTS**

    A.   **The '121 Patent's Storage And Retrieval Invention**

        1.   **Ampex's Dan Beaulier Invents A New Architecture For Image Processing**

The '121 patent relates to devices known as "electronic still stores." An electronic still

store is a device that stores still images in electronic form. From the 1970's through today,

electronic still stores have been used in a wide variety of applications, including broadcast

television, medical imaging, document storage, and photography, including digital still cameras.

Ampex introduced the first electronic still stores in 1976. (Beaulier 7/12/05 Witness

Statement, p.3, Christiansen Ex. 1.)[1] Competitors, including Quantel, Harris, and ADDA soon

followed. By the early 1980's there was a healthy market for electronic still stores, especially in

the broadcast industry. Although electronic still stores were a significant improvement over pre-

existing image storage and retrieval technologies, they nonetheless suffered from a number of

drawbacks.

An important drawback related to the speed at which a large number of stored images

could be reviewed. Then, as now, still store users wanted to be able to find one or more

particular images from many images as quickly as possible. As the storage capacity of electronic

still stores increased, however, so did the burden on still store users to rapidly find images for

manipulation or display.

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[1] "Witness Statement" refers to direct witness testimony in the related ITC investigation, *In the Matter of Certain Digital Image Storage And Retrieval Devices*, Inv. No. 337-TA-527. "Christiansen Ex. _" refers to exhibits attached to the Declaration III of Karen A. Christiansen In Support Of Ampex's Opposition To Defendants' Motion For Summary Judgment Of Inequitable Conduct, submitted herewith.

The image review problem persisted into the 1980's. By then, the state of the art solution was to provide "browse" screens. Browse screens allowed a user to call up several images to be viewed at the same time on the same screen. But the browse screens could not be generated quickly. To create a browse screen, the still store had to retrieve each image from storage, reduce the image, and then display it on the screen. The process could take 1/4 to 1/2 second for each image, much too long for a busy image editor. (*See* Zado Ex. 1, Col. 1:10-61; Beaulier 7/12/05 Witness Statement, p.7, Christiansen Ex. 1.)[2]

A solution to the problem eluded the electronic image storage industry until 1981, when Dan Beaulier of Ampex devised a new architecture for electronic still stores. Mr. Beaulier's new architecture used the same well-known, fundamental building blocks that still stores always had used. But Mr. Beaulier did not use the conventional "architecture" (*i.e.*, arrangement) of the blocks. He rearranged the fundamental building blocks to accomplish a new approach to image storage and recall. (Beaulier 7/12/05 Witness Statement, p.11, Christiansen Ex. 1.)

Mr. Beaulier's new architecture had a number of advantages. Perhaps most important, it eliminated the need to perform a size reduction every time an image was recalled for display on a browse screen. Under Mr. Beaulier's new scheme, the reduced-size image is generated **automatically** when the image is first introduced into the still store, and stored together with the original image. Instead of having to reduce the original images one by one when the user commands a browse screen ("on-the-fly" size reduction), the still store need only access the pre-existing reduced-size images that correspond to a given image. (Zado Ex. 1, Col. 2:32-51; Beaulier 7/12/05 Witness Statement, p.7, Christiansen Ex. 1.) The resulting time savings for generating a browse screen increases in proportion to the number of images on the screen.

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[2] "Zado Ex. _" refers to exhibits attached to the Declaration of Ray R. Zado In Support Of Ampex Corporation's Motion For Summary Judgment That U.S. Patent No. 4,821,121 Is Not Unenforceable Due to Inequitable Conduct (D.I. 285).

Mr. Beaulier's new architecture, and its corresponding methods for storing and retrieving images, have since become industry standards for electronic still store products. Its widespread use today includes most of the digital still cameras sold in the United States, including every camera sold today by defendant Kodak.

2.   Fig. 1 – The New Architecture

The '121 patent describes and claims Mr. Beaulier's new electronic still store architecture, as well as methods for using that architecture. Figure 1 of the '121 patent shows the new architecture in block diagram form. (Zado Ex. 1.) Each block represents a different building block of the architecture. The thin lines represent the flow of information between the blocks. The thick lines represent "bus" connections with the Central Processing Unit (16), which serves as a master controller and coordinator for the various structural blocks.

Figure 1 is a high level block diagram that shows only the basic building blocks of an electronic still store. Any given electronic still store could have additional components (not shown on Fig. 1), corresponding to additional features required by that particular still store. Accordingly, the inventions of the '121 patent are not limited to the exact blocks shown on Figure 1. A still store designer could add blocks in a variety of ways consistent with the fundamental architecture shown in Fig. 1.

An important feature of the architecture is the arrangement and relationship of the "disk store" (24), where images are kept for long-term storage, the "frame store" (22) (Random Access Memory or RAM), where images are kept for short-term storage either upon input or prior to display, and the "size reducer" (26), where images are reduced to a fraction of their original size for use in a browse screen. Notably, the architecture allows the frame store to both receive and output images without passing through the size reducer. As illustrated below, the architecture also allows reduced-size images to be generated by the size reducer sending data to, and

receiving data from, only the frame store. One result of this architecture is that data for the full

size image and the corresponding reduced-size image are in the frame store simultaneously. The

frame store receives an input from "Input A/D" (14), from which new images are received, and

has an output to "Output D/A" (28), from which images may be output. The frame store also has

input from and output to the disk store, so that the full size and reduced-size images may be

permanently stored and later retrieved. (*See* Zado Ex. 1, Col. 3:44 – Col. 4:63.)

As shown below, the specific order of automatic operations is as follows: 1) the image is

received by the video input (12); 2) the image is converted from an analog image into a digital

image by input A/D converter (14); 3) the image is passed to the frame store (22); 4) the image is

passed to the size reducer (26) to generate a reduced-size image; 5) the reduced-size image is

passed back to the frame store (22) where the original image remains stored; and 6) the original

and reduced-sized images are placed into disk store (24) for permanent storage.

Fig. A - '121 Patent: Generating and Saving a Reduced Size Image
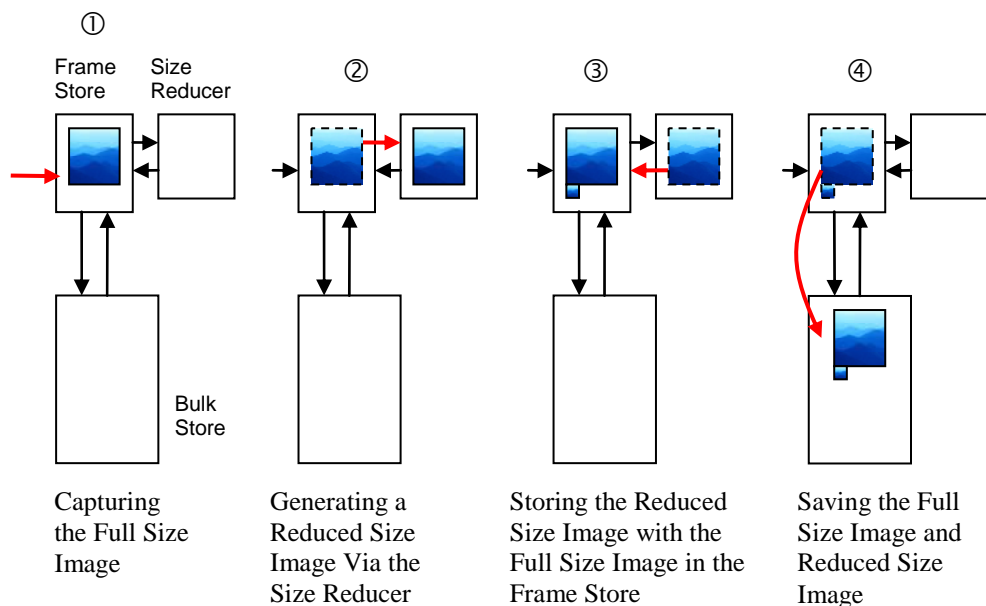
The Beaulier architecture allows efficient image storage and rapid image review. Reduced-size images are automatically generated upon first input of the original image, and then stored together with the original image in the disk store. When a user executes the browse command, the CPU automatically directs the recall of reduced-sized images from disk store for assembly in the frame store, and display, of the browse screen. (Zado Ex. 1, Col. 4:45-63; *see* figures entitled "Browse Mode," attached at Tab A.)[3]

3.   The Prior Art

The Beaulier architecture is not only faster than, but also a substantial departure from earlier electronic still store architectures, which were similar to each other. Reproduced in the figure below are simplified block diagrams of the '121 patent architecture, and the architecture of the closest prior art, U.S. patent no. 4,302,776 (the '776 patent). The figure shows the arrangement of the frame store, size reducer, and bulk store (disk store) elements of Figs. 18 and 19 of the '776 patent on one hand, and Fig. 1 of the '121 patent on the other hand. (Zado Ex. 1; Zado Ex. 5.)

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[3] The figures at Tab A were attached at Tab 1 to Ampex's Opening Claim Construction Brief (D.I. 300.)

Fig. B

PRIOR ART		INVENTION
'776 Fig. 18	**'776 Fig. 19**	**'121 Figure**

Frame Store

Size Reducer

Bulk Store

Frame Store

Size Reducer

Bulk Store

Frame Store

Size Reducer

Bulk Store
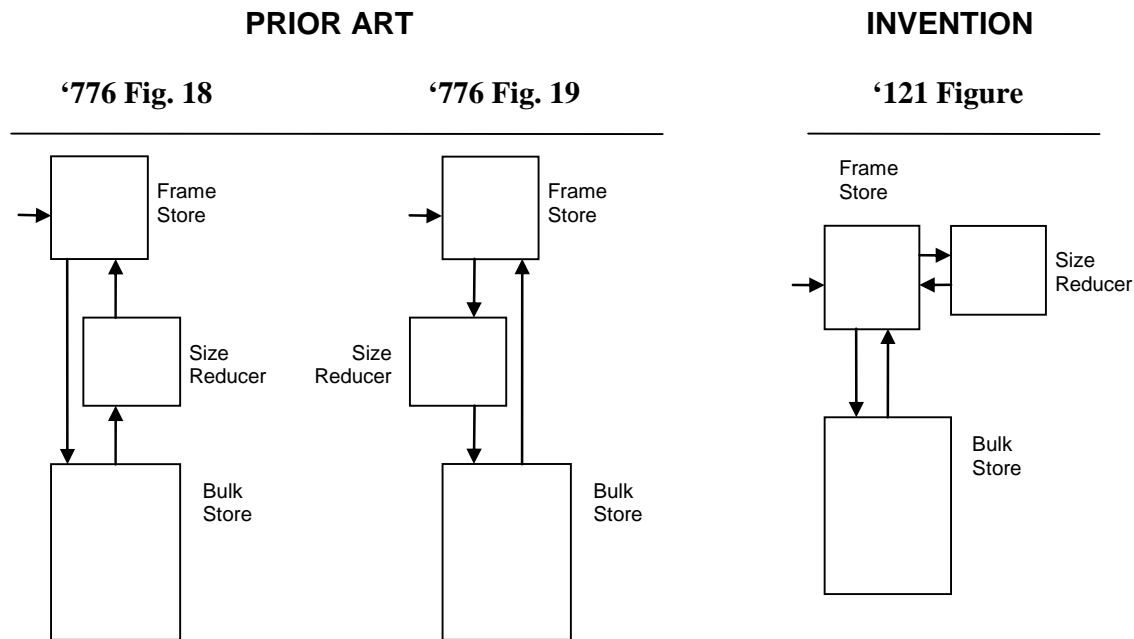
The simple comparison reveals important structural differences between the '121 patent architecture and the variations of the '776 patent architecture. In the '776 patent architecture, the size reducer is interposed between the frame store and the bulk store. Images cannot pass both to and from the bulk store, or to and from the frame store, without passing through the size reducer. Not so in the '121 patent. The size reducer does not lie in the path between the frame store and the bulk store. Images can pass between the frame store and bulk store without passing through the size reducer.

These structural differences are not the only important differences between the teachings of the '121 patent and '776 patent, and indeed the remainder of the prior art. The '121 patent was the first to teach that full-size images and reduced-size images could be stored together in the disk store, allowing rapid generation of a browse screen, for rapid location and recall of an original image using the browse screen.

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B.   The Prosecution Of The '121 Patent

Ampex filed the patent application that led to the '121 patent in April, 1983. The

prosecution of that application before the Patent Office proceeded in two phases. In the first

phase, Ampex and the Patent Examiner negotiated claim language to distinguish the Beaulier

invention from the Quantel DLS6000, an electronic still store described in an article by Hugh

Boyd. In the second phase, Ampex and the Examiner negotiated claim language to distinguish

the Beaulier invention from the '776 patent. Once both Boyd and the '776 patent had been

properly distinguished, the Patent Office issued the '121 patent.

1.   Phase 1: Ampex Distinguishes Quantel DLS6000 (Boyd) Because It Lacks "Automatic Use Of The Size Reducer"

The Quantel DLS6000 was an electronic still store made by Ampex's competitor,

Quantel. One description of the DLS6000 is in an article written by Hugh Boyd, and published

in March, 1980. The article is entitled, "The Quantel DLS6000 – A New Digital Still Store

Library System." (Christiansen ¶ 2.)[4]

The Quantel DLS6000 was a state of the art electronic still store prior to the Beaulier

invention. Its pertinent architecture and operation are described in Column 1 of the '121 patent.

As described in the '121 patent, the DLS6000 taught "on-the-fly" size reduction, in which

images to be displayed on a browse screen "must first be read from the disk store as full size

images and then reduced for insertion into the multi-image display." (Zado Ex. 1, Col. 1:36-38.)

The arrangement of the frame store, size reducer, and bulk store of the DLS6000 is

depicted in Figure 18 of the '776 patent. (*See* illustration at page 7, *supra*.) While the

arrangement of those structures differed in the Beaulier architecture, Ampex did not distinguish

the Beaulier application from the Boyd article on that basis. Instead, Ampex introduced claim

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[4] "Christiansen ¶ _" refers to the Declaration III of Karen A. Christiansen In Support Of Ampex's Opposition To Defendants' Motion For Summary Judgment Of Inequitable Conduct, submitted herewith.

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language distinguishing Beaulier's automatic creation and storage of reduced-size images from the Quantel DLS6000's "on-the-fly" creation of reduced-size images. In claims 7, 8, 12 and 14, for example, Ampex added language requiring that the size reducer be "responsive to" the frame store. (Christiansen ¶¶ 3-4.)

From the very first Office Action, the Patent Office recognized unique features of Mr. Beaulier's invention that distinguished it from the prior art. Only the Beaulier patent taught, for example, "size reduction and production of the 'frame' of video data is performed by the interaction between the size reducer and the frame store *prior* to storage in the image storage;" and "the 'frame' of video, containing both resolution copies, is non-selectively produced for all images that are stored." (Christiansen ¶ 5.) Thus novelty of the Beaulier invention over the DLS6000, and indeed all of the cited art, was never at issue.

2.   Phase 2: Ampex Distinguishes Taylor ('776) As Structurally Different

Having distinguished the Quantel DLS6000 for its failure to teach automatic creation of reduced-size images, Ampex and the Patent Office turned next to the '776 patent, issued to "Taylor et al." and assigned to the same Quantel that sold the DLS6000. Not surprisingly, the '776 patent taught the same "on-the-fly" size reduction as the DLS6000. The '776 patent shows further detail and description, and teaches some alternative embodiments.

As with the DLS6000, there was never an issue as to whether the '776 patent actually taught the Beaulier invention. The issue was, instead, drafting the claims to ensure they did not include the '776 patent within their scope. In an Office Action dated January 4, 1988, the Patent Office rejected some of the pending claims in view of the '776 patent. The Examiner found other claims to be allowable over the '776 patent, if other changes were made to address technical problems. (Christiansen ¶ 6.)

On April 27, 1988, Ampex amended the claims, and cancelled two claims (rewriting them with a new, replacement claim), to address the Examiner's rejections. Ampex argued that that the amended claims and replacement claim distinguished the '776 patent. In Ampex's remarks accompanying its amendments, Ampex emphasized the structural differences between the Beaulier invention and the '776 patent. Ampex noted, for example, that Beaulier's size reducer (26) is "bidirectionally coupled" to the frame store (22). (Christiansen ¶ 7.)

On July 22, 1988, the Patent Examiner maintained his rejection in view of the '776 patent of the pending claims rejected on that ground, and extended that rejection to some of the claims that had previously been described as "allowable." In paragraph 3(b) of the Office Action of that date, the Examiner stated that Taylor's size reducer also is "bidirectionally coupled" to the image store, because "the output of the size reducer is fed back to the frame store via the disk store." (Christiansen ¶ 8.)

On October 5, 1988, Ampex amended the claims again. Ampex cancelled some of the claims rejected in light of the '776 patent, and amended others. Ampex further articulated the structural differences between Mr. Beaulier's invention and the '776 patent. Ampex stated, for example, that "Taylor et al fails to describe and does not intend the storage of both a reduced-size and a full size image in his frame store . . . ." (Christiansen ¶ 9.) Ampex continued on to identify three aspects of the structural differences as they relate to the processing of full-size and reduced-size images:

> Taylor et al fails to teach the above features of storing both image sizes simultaneously in the random access memory, the direct transfer of images between the disc storage and the random access memory, or the transfer of images directly between the size reducer and only the random access memory. (*Id.*)

Ampex's amendments to the claims were in accord with its distinction of the '776 patent. Ampex added the word "simultaneously" to emphasize the simultaneous storage of full and

reduced-size images in the frame store. Ampex added language requiring "direct transfer" of full and reduced-size images from the bulk store to the frame store to distinguish '776 patent embodiments in which the size reducer was interposed between them. Ampex added similar language to emphasize the direct coupling of the frame store and the size reducer. (*Id.*)

Following these amendments, the Examiner allowed the claims, and the '121 patent issued. (Christiansen ¶ 10.)

C.   Ampex's AVA Video Graphics System

Ampex introduced the first electronic still store including the inventions of the '121 patent, the ESS-3, in April, 1983. The successful ESS-3 introduction came approximately three years after another, less successful, product introduction: the Ampex Video Art system (AVA). Defendants allege that Ampex should have disclosed information about AVA to the Patent Office during the prosecution of the '121 patent.

AVA was primarily a video graphics tool. It was designed to allow the creation and creative editing of electronic images.

While AVA had electronic still store capability, it did not have advanced features required for rapid review of a library of images. It did not have a browse feature – not even the slow "on-the-fly" browse feature of the Quantel prior art cited in column one of the '121 patent. (*See generally*, Zado Ex. 14.) In order to create a screen with multiple images, an operator would have had to execute a complicated, time-consuming series of manual steps (and even then it would not have been useful to retrieve full size images).

The generation of reduced-size images in AVA is substantially the same as is shown in Fig. 18 of the '776 patent (when Fig. 18 was manually controlled).[5] The CPU, acting as the size

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[5] In the Quantel still store, Fig. 18 was used to create the browse screen automatically, "on-the-fly." It could also be used manually to create a single reduced size image on-the-fly. (Christiansen Ex. 1 at ¶98.)

reducer, is interposed between the bulk store (a magnetic disk) and the RAM (a frame store). (Zado Ex. 15 at AMP008685, AMP008726; Christiansen Ex. 2 at ¶ 97) In order to generate a reduced-size image, a full size image first had to be stored on the bulk store. Then, a reduced-size image could be manually generated, on-the-fly, by passing the full size image from the bulk store, to the CPU/ size reducer, and then to the frame store. (Christiansen Ex. 2 at ¶¶ 168-169; Zado Ex. 14 at AMP008214-18.)

Although like Fig. 18 for generation of reduced size images, AVA is like Figure 19 of the '776 patent in one respect, in that AVA allows for the transfer of anything stored on its disk store to the frame store, without passing through a size reducer. (Christiansen Ex. 2 at ¶¶ 97, 186; Zado Ex. 15 at AMP008685, AMP008687.) The parties dispute whether AVA's disk store could store reduced-size images. (Christiansen Ex. 2 at ¶¶ 170-171.) But, even assuming that AVA could store reduced-size images on disk, its ability to transfer those alleged reduced-size images from bulk store to frame store was identical to that of Figure 19 of the '776 patent.

The comparison between Fig. 18, Fig. 19, and AVA become even clearer when comparing the following illustrations of generating, storing and recalling reduced size images as disclosed in the three systems.

Fig. C - '776 Fig. 18: Generating, Saving, and Recalling a Reduced Size Image

①	②	③	④	⑤

Frame Store

Size Reducer

Bulk Store

①	②	③	④	⑤
Capturing the Full Size Image	Saving the Full Size Image	Inserting Image Back with Size Reduction Invoked	Saving the Composite Image (*which Defendants assert is storing a reduced size image*)	Recalling the Composite Image
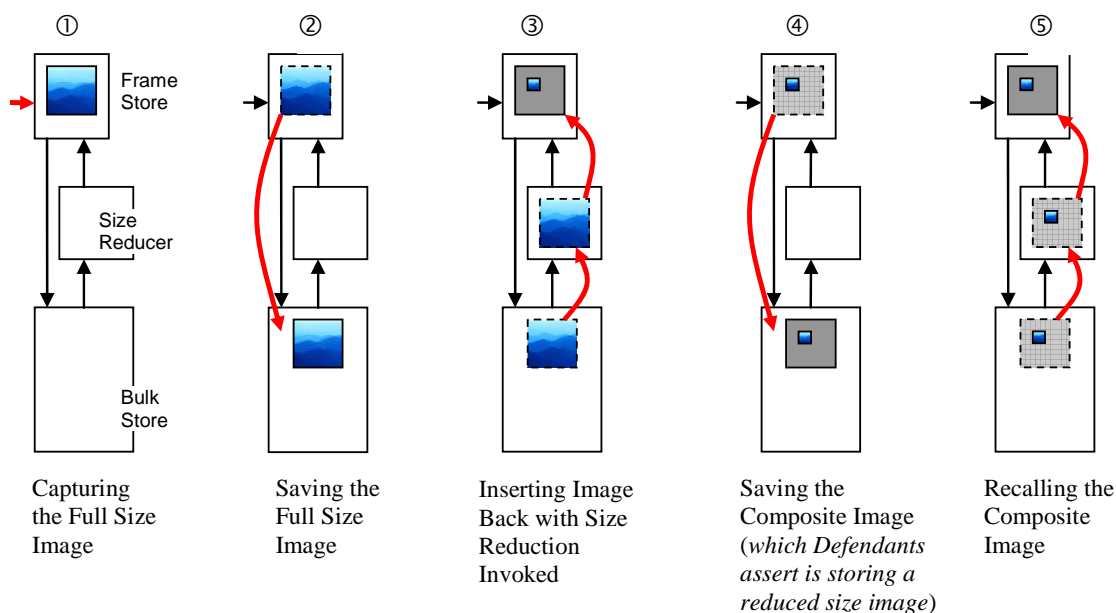
Fig. D - '776 Fig. 19: Generating, Saving, and Recalling a Reduced Size Image

①	②	⑤

Frame Store

Size Reducer

Bulk Store

. . . in Step 2, Fig. 19 of the '776 patent achieves Steps 2, 3 and 4 of the AVA process illustrated below in just one step . . .

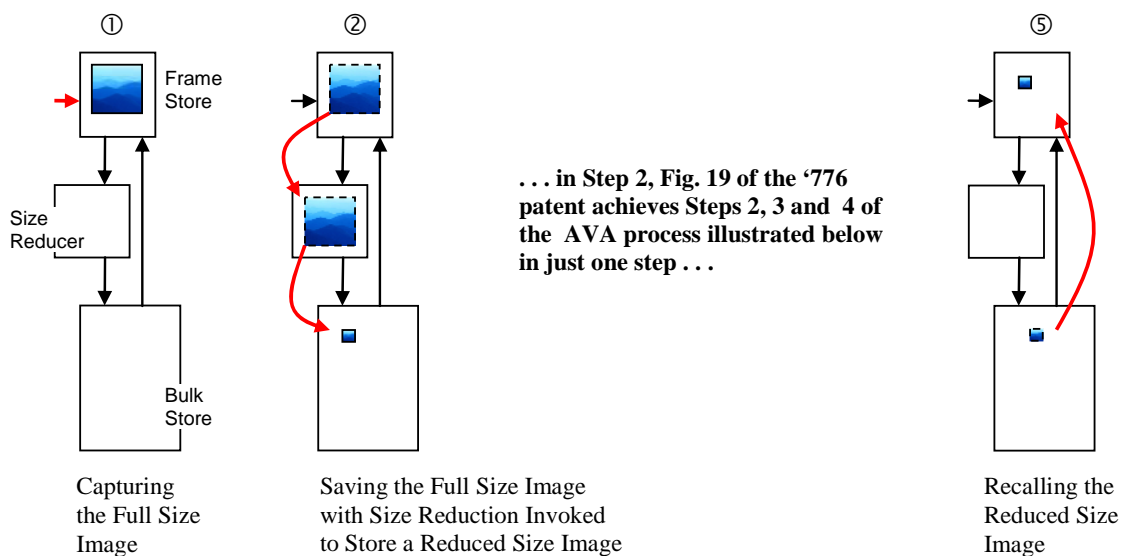| ①	②	⑤
Capturing the Full Size Image	Saving the Full Size Image with Size Reduction Invoked to Store a Reduced Size Image	Recalling the Reduced Size Image

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Fig. E - AVA: Generating, Saving, and Recalling a Reduced Size Image
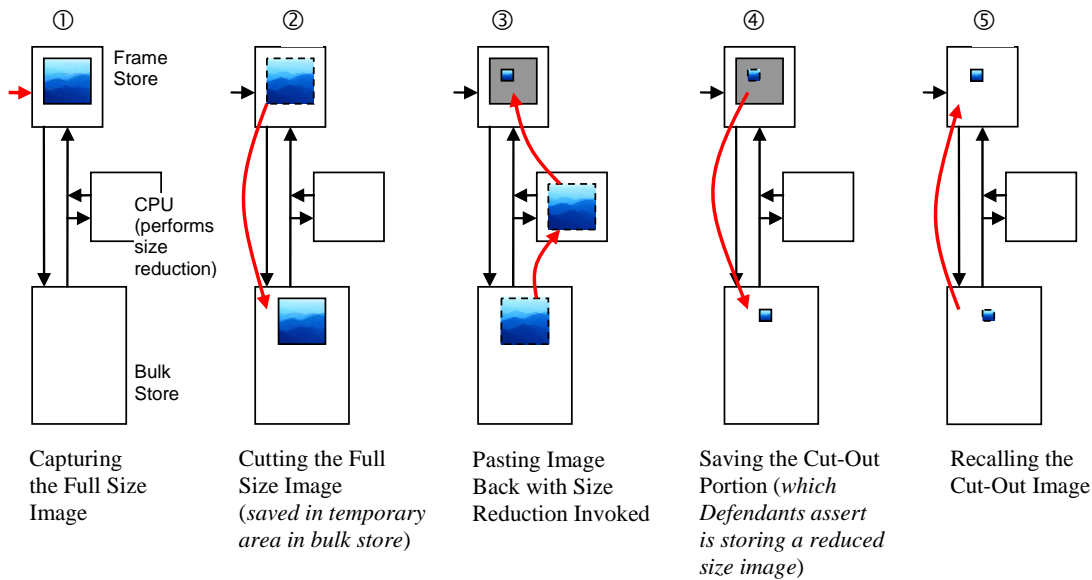
AVA does not teach anything not already disclosed in the '776 patent. (Christiansen Ex. 2 at ¶¶ 94, 166.) If AVA has "direct transfer" capability as alleged by Defendants, then so too must the '776 patent.

No one involved with the prosecution of the '121 patent believed that there was any reason to disclose any aspect of the AVA system to the Patent Office. (Beaulier 7/24/05 Rebuttal Testimony, p. 2-3, Christiansen Ex. 3; Roth 5/16/05 Tr. 139:17-23, Christiansen Ex. 4; Almeida 5/17/05 Tr. 60:14-20, 37:19-22, 38:15-20, 40:23 - 41:8, 42:25-43:2, Christiansen Ex. 5; Beaulier 3/22/05 Tr. 85:21-24, Christiansen Ex. 6; Talcott 3/17/05 Tr. 71:24-72:15, Christiansen Ex. 10; Talcott 3/16/05 Tr. 10:9-16, Christiansen Ex. 11.)

IV.   ARGUMENT

A.   The Law Of Inequitable Conduct

Patent applicants have a duty to prosecute patent applications with "'candor, good faith, and honesty.'" *Liquid Dynamics Corp. v. Vaughan Co.,* No. 05-1105, 05-1325, 05-1366, 05-1399, 2006 WL 1493004, at *14 (Fed. Cir. June 1, 2006) (citation omitted). A breach of that

duty constitutes inequitable conduct and renders any patent issuing from the application

unenforceable. *Id.* (citation omitted). The duty of candor applies only to those individuals

substantively involved in patent prosecution. *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co.*, 439 F.3d 1335, 1339 (Fed. Cir. 2006).

When an infringer alleges that a patent applicant's failure to disclose information

constitutes inequitable conduct, the infringer must prove as a threshold matter: 1) the

information would have been material to the Patent Office; 2) the patent applicant knew of the

information and its materiality; and 3) the patent applicant withheld the information with an

intent to deceive. *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1128 (Fed. Cir.

2006). If the infringer makes a prima facie showing of all three elements, the court must balance

the degree of materiality with the level of intent to determine whether a finding of inequitable

conduct would be appropriate. *Id*.

Information is material if there is a substantial likelihood a reasonable examiner would

have considered the information important in deciding whether to allow the application to issue

as a patent. 37 C.F.R. § 1.56 (2005); *Liquid Dynamics Corp.*, 2006 WL 1493004, at *14

(citation omitted). Information is not material if it is cumulative to, or less material than,

information already disclosed to the patent office. *Digital Control Inc. v. Charles Mach. Works*,

437 F.3d 1309, 1319 (Fed. Cir. 2006).

Inequitable conduct must be proved by clear and convincing evidence. *See Liquid

Dynamics Corp.*, 2006 WL 1493004, at *14 (citation omitted). Summary judgment of

inequitable conduct is not appropriate if the patentee provides a credible explanation for non-

disclosure. *Digital Control Inc.*, 437 F.3d at 1314; *see also Ferring B.V. v. Barr Labs.*, 437 F.3d

1181, 1191 (Fed. Cir. 2006).

B.   The Prior Art's Alleged "Direct Transfer" Ability Would Not Have Been Material Information

Defendants allege that the ability of the prior art, including AVA, to perform "direct transfers" was material information and should have been disclosed to the Patent Office. This is the only information Defendants allege was not disclosed for the purposes of Defendants' motion for summary judgment.

The sole basis for Defendants' materiality argument is that the prior art's alleged "direct transfer" ability is inconsistent with a single statement made during the prosecution of the '121 patent. (Defendants Br. 14.) Defendants purport to quote that statement three times in its brief. In each case, however, Defendants changed the quote, substantially changing its meaning. Defendants' materiality argument depends entirely on the change it made to the actual quote.

Below is the quote as it actually reads in the prosecution history. It relates to how the claims distinguish a single prior art reference, the '776 patent issued to Taylor et al:

> Taylor et al fails to teach the above features of storing both image sizes simultaneously in the random access memory, the direct transfer of images between the disc storage and the random access memory, or the transfer of images directly between the size reducer and only the random access memory. (Christiansen ¶ 11.)

To create an apparent inconsistency, Defendants made a substantial change. They substituted the words "The prior art" for "Taylor et al." In so doing, Defendants changed the statement from a specific characterization of a single prior art reference into a general all-encompassing statement about the entire prior art. The result is a completely different statement than the one actually made by Ampex. Here is the statement as broadened by Defendants, with the changed language in bold:

> **[The prior art]** fails to teach the above features of storing both image sizes simultaneously in the random access memory, the direct transfer of images between the disc storage and the random

access memory, or the transfer of images directly between the size reducer and only the random access memory. (Defendants Br. 14.)

The alleged "direct transfer" ability of the prior art has nothing to do with whether Taylor et al. taught direct transfer. Ampex never contended that the "prior art" as a whole lacks direct transfer capability. The Examiner had considered the '776 patent during prosecution and could decide for himself whether the '776 patent taught "direct transfer." Thus no reasonable examiner would have considered the alleged "direct transfer" ability of the prior art to be pertinent to the merits of Ampex's statement about the '776 patent. *Compare and contrast, e.g., eSpeed, Inc. v. Brokertec USA, L.L.C.*, 417 F. Supp. 2d 580, 593 (D. Del. 2006) (where patent applicant distinguishes the "prior art" for lack of a feature, that feature is material if not disclosed).

Defendants do not attempt to justify their misrepresentation of the prosecution history. Defendants do not explain why Ampex's specific statement should be read so much more broadly than the plain words state. Defendants also disregard the fact that Ampex had no need to make a broad disclaimer to distinguish over the prior art in general. The claims as written included numerous other distinctions over the prior art.

Defendants may have an additional motive to misrepresent the prosecution history: to obscure a flaw in its proposed claim construction of "direct transfer." Ampex's proposed construction of the term is based on the fact that the "direct transfer" language was intended to distinguish specific embodiments of the '776 patent. Defendants' proposed construction, on the other hand, would broaden what Ampex disclaimed (and thereby narrow the claims) not only to distinguish the '776 patent, but would, if taken literally, cause the preferred embodiment disclosed in the '121 patent, as well as any other real world circuit, to fall outside the claim..

Allegedly non-disclosed information cannot be material because it contradicts a statement that the patentee did not make. Because Defendants have not, and cannot, demonstrate that the

alleged "direct transfer" ability of the prior art contradicts or is inconsistent with the actual

statement made by in the prosecution history, Defendants do not even make out a prima facie

case of materiality. This alone is sufficient to warrant denial of Defendants' motion.

C.   AVA's "Direct Transfer" Ability Is Cumulative

Defendants' allegation of materiality is defective for another reason: Defendants make

no showing that the alleged "direct transfer" ability was not cumulative or less material than the

cited art. Defendants do not compare the allegedly non-disclosed information with any of the

prior art disclosed to the Patent Office. Yet again Defendants fail to make out even a prima facie

case of materiality.

The allegedly non-disclosed information is cumulative at best to the prior art cited to the

Patent Office. Defendants cannot disprove that "direct transfer" ability would have been, at

most, cumulative.

Defendants rely principally on the AVA system as a source of allegedly non-disclosed

information. AVA does not disclose anything not already disclosed in the '776 patent cited to

the Patent Office. The Fig. 19 illustration at page 13, *supra*, illustrates the point. It shows the

pertinent portions of the architectures of '776 patent Fig. 19 and how it is used to accomplish the

storage and retrieval of reduced-size images in fewer steps than AVA. AVA's more

cumbersome arrangement is further removed from the '121 patent approach than is Figure 19 of

the '776 patent. (*Cf.* the '121 illustration at page 6, *supra*.) AVA is less material than Figure 19

of the '776 patent because it must generate reduced-size images in the manner of Figure 18,

which, as illustrated at page 13, *supra*, requires the full size image to first be stored in bulk store.

But AVA is even further from Figure 18 of the '776 patent, because it does not have a

browse feature. In addition, it cannot even store reduced-size images in its disk store, as required

by the claims. Figure 19 of the '776 patent, though teaching an inferior architecture to the '121

patent, does teach storage of reduced-size images (albeit manually generated and stored).

There can be no genuine dispute that AVA is at most cumulative to the cited prior art.

Given that, the Court not only should deny Defendants' motion for summary judgment, but also

grant Ampex's motion for summary judgment of no inequitable conduct based on AVA. *See*

Ampex Corporation's Motion For Summary Judgment That U.S. Patent No. 4,821,121 Is Not

Unenforceable Due to Alleged Inequitable Conduct For Failure To Disclose The Quantel

DLS6000, Quantel PaintBox, Or Ampex AVA Systems (D.I. 283); *Abbott Labs v. Torpharm,*

Inc., 300 F.3d 1367, 1380 (Fed. Cir. 2002) (affirming summary judgment of no inequitable

conduct for failure to introduce sufficient evidence of either materiality or intent).

Defendants cite some articles about AVA and deposition testimony to the effect that

AVA taught "direct transfers" of images between the frame store and bulk store. As an initial

matter, the "direct transfers" referred to in the articles and testimony pertain only to transfers of

full size images. The "direct transfers" referred to in the claims and the prosecution history

involve both full and reduced-size images. In any event, these statements about AVA's

capabilities do not make AVA any less cumulative. The fact remains that Defendants do not

point to a single feature or function in AVA not disclosed in the '776 patent. Defendants make

no effort to compare what was cited with what was not. It is telling that Defendants do not cite

or rely on any of the technical materials and engineering documents describing the actual

operation of AVA.

Defendants argue that the '915 patent discloses "direct transfers." It too is less material

than the '776 patent. The '915 patent describes some of AVA's features, and is at best

cumulative for the same reasons AVA itself is cumulative. But the '915 patent is even further

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removed because it does not describe generation (let alone storage) of reduced-size images. It

does not even describe the "cut-and-paste" command Defendants argue enables the creation of

reduced-size images.

Defendants finally argue that "direct transfers" were well known in the prior art, citing

for example Mr. Beaulier's testimony. It is unclear, however, what Defendants believe Ampex

should have disclosed. Defendants do not identify any particular prior art reference that

allegedly teaches "direct transfers" other than AVA. To the extent Defendants argue that Ampex

somehow should have disclosed the general idea of "direct transfers," that information too would

have been cumulative. Ampex disclosed EPO patent 0051305, which teaches such "direct

transfers." (Christiansen ¶ 12.)

D.   Defendants Fail To Prove Knowledge

Defendants fail to prove that any person it alleges had a duty to disclose the "direct

transfer" capability had knowledge of the information and its alleged materiality.

1.   Dan Beaulier Did Not Have the Requisite Knowledge

Dan Beaulier, the inventor of the '121 patent, could not possibly have known of the

alleged materiality of the alleged "direct transfer" capability. Mr. Beaulier left Ampex in 1985,

more than three years before Ampex included the "direct transfer" language in its patent claims

and distinguished the '776 patent to Taylor et al. based on structural differences. (Beaulier

7/12/05 Witness Statement, p.2, Christiansen Ex. 1; Christiansen ¶9.) Mr. Beaulier had no way

of knowing that there even was an issue relating to "direct transfer." Defendants do not set forth

any facts that even suggest Mr. Beaulier was aware of the issue.

Defendants also do not set forth any facts from which one could reasonably infer that Mr.

Beaulier had any knowledge of how size reduction worked in the AVA system. Defendants

prove only what Ampex does not dispute – that Mr. Beaulier worked briefly on one part of the

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AVA system. Mr. Beaulier's involvement did not even relate to digital technology: his

responsibility was to assist the design of an analog board. The boards had nothing to do with

size reduction or the cut and paste function of AVA. (Beaulier 7/24/05 Rebuttal Testimony, p. 3,

Christiansen Ex. 3.).[6]

Defendants nonetheless asserts that Mr. Beaulier had "first hand knowledge" was "fully

involved" in developing AVA system. (Defendants Br. 8) But Defendants ignore Mr. Beaulier's

most pertinent testimony to the contrary:

> A.   I knew AVA could reduce the size of an image, but I didn't know how that
>   was done.
>
> . . .
>
> Q.   Prior to 1989, did you know how images moved between the disk store
>   and the frame store in the AVA?
>
> A.   No, I did not. (Beaulier 7/24/05 Rebuttal Testimony, p. 3, Christiansen
>   Ex. 3.)
>
> Q.   And would images move between the disk store and the frame store in the
>   AVA?
>
> A.   Do you, again, mean electronically?
>
> Q.   Yes.
>
> A.   I don't know. (Beaulier 3/22/05 Tr. 206:3-7, Christiansen Ex. 6.).
>
> Q.   Were you aware, at the time you made the decision to incorporate a direct
>   transfer from disk to frame store in the Phoenix system, that the AVA
>   system had the ability to transfer directly from disk to frame store?
>
> A.   Not specifically.
>
> Q.   Was that generally known at Ampex, that the AVA could do that?
>
> . . .

---

[6] "Rebuttal Testimony" refers to witness rebuttal testimony in the related ITC investigation, *In the Matter of Certain Digital Image Storage And Retrieval Devices*, Inv. No. 337-TA-527.

A.   I don't know. (Beaulier 4/4/06 Tr. 244:14-23, Christiansen Ex. 7.).

Moreover, Mr. Beaulier did not become familiar with the AVA circuitry by using

the AVA in developing his own ESS-3 product:

Q.   Now, in connection with your use of the AVA in the development of the
      Phoenix-2 system, did you become familiar with any of the AVA
      circuitry?

A.   No. (Beaulier 4/4/06 Tr. 32:20-23, Christiansen Ex. 7.)

Ampex does not dispute that Mr. Beaulier used the computer system that was

used in AVA to test his ideas for the ESS-3. But Mr. Beaulier was using the AVA computer as a

general purpose computer, not as the AVA graphics product itself. Mr. Beaulier testified that he

was not operating the AVA product system at the time of such work. (Beaulier 4/4/06 Tr. 43:18-

20, Christiansen Ex. 7.). Mr. Beaulier could not have learned about the operation of AVA

applications (such as size reduction) through such tests, because the AVA applications were *not*

running at the time of his tests. (Beaulier 4/4/06 Tr. 32, 42-43, Christiansen Ex. 7.)

Defendants finally assert that Mr. Beaulier conceded that "direct transfer" was

"well known in the art" (citing Beaulier 4/4/06 Tr. 243-44, Christiansen Ex. 7). Kodak fails to

mention that Mr. Beaulier testifies on the very next page that he did not think that the AVA had

"direct transfer." Directly following the passage cited by Defendants regarding what was

"generally known," Mr. Beaulier explains his understanding that AVA did ***not*** directly transfer

images between the disk store and frame store:

A.   **I don't know if it was generally known. I'm hung up with the
      statement "direct," because I believe it goes through the computer
      and through an operating system.** That's the way computer-based
      systems work, and that was what I would have assumed.

Q.   Are you saying that when an image is transferred from disk to frame store
      on the NAB '83 version of the ESS-3, that it is transferred through the
      computer?

A.   No. **I'm saying on AVA**, which was a – initially, as I saw it when I was hired on, it was a bunch of outside hard pieces of hardware that people looked up. My impression would certainly be that everything that goes onto the disk drive came from the computer and **not directly** from the frame store. (Beaulier 4/4/06 Tr. 245:1-16, Christiansen Ex. 7 (emphasis added).)

Mr. Beaulier also testified that the ESS-3 system, which embodied the claimed invention, directly transferred images from disk to frame store:

Q.   It is your understanding that the ESS-3 system shown at NAB could transfer images directly from disk to . . . frame store?

A.   Of course. (Beaulier 4/4/06 Tr. 243:2-7, Christiansen Ex. 7.)

2.   Greg Roth Did Not Have the Requisite Knowledge

Greg Roth is a patent attorney who drafted and filed the application leading to the '121 patent in 1983. He did not have any further involvement in patent prosecution. Like Mr. Beaulier, Mr. Roth had no way of knowing of the addition of the "direct transfer" claim language, and thus could not have known of the materiality of any prior art "direct transfer" ability.

Ampex agrees that Mr. Roth was aware of the AVA system, and that he drafted the application leading to the '915 patent, which covers aspects of the AVA System. But Defendants offer no proof he had any knowledge of how AVA created, stored, or retrieved reduced-size images. The '915 patent does not even address size-reduction or the cut and paste function on which Defendants rely. Defendants took Mr. Roth's deposition, but did not ask him about his knowledge of "direct transfer," much less whether he knew if AVA transferred reduced-size images. Mr. Roth testified that he was not aware of any material prior art that was not disclosed with the patent application. (Roth 5/16/05 Tr. 139:20-23, Christiansen Ex. 4.)

3.   George Almeida Did Not Have the Requisite Knowledge

George Almeida was the Ampex patent agent who prosecuted the application for the '121

patent at the time the "direct transfer" language was added to the claims. Yet there is no

evidence he had any detailed knowledge of the AVA System. Ampex tries to infer such

knowledge solely from two alleged facts: 1) Mr. Almeida was the patent agent responsible for

the Audio Visual Systems Division, which was the same engineering division that designed

AVA; and 2) Mr. Almeida's name appears as an Ampex patent agent on the '915 application.

Defendants' inference is unreasonable. Defendants' logic would impute to Mr.

Almeida's knowledge every system designed by Audio Visual Systems Division. Defendants

cannot reasonably impute knowledge of AVA from the appointment of agents who were eligible

to prosecute the application leading to the '915 patent. It was Ampex's practice that all of

Ampex's patent agents were appointed and made eligible to prosecute the application; whether

or not they did is a different question. (Talcott 2/23/06 Tr. 363:23-364:10, Christiansen Ex. 8.)

In fact, Mr. Almeida had no substantive involvement in the '915 patent prosecution – his name

does not appear on a single paper filed by Ampex other than appointment paper -- and

Defendants do not allege otherwise.

4.   Joel Talcott Did Not Have the Requisite Knowledge

Joel Talcott is Vice President, General Counsel and Secretary of Ampex. At the time of

the application leading to the '121 patent Mr. Talcott was Ampex's patent counsel. During the

pendency of the '121 patent Mr. Talcott became general counsel.

Mr. Talcott was not substantively involved in the prosecution of the '121 patent. (*E.g.*,

Talcott 2/23/06 Tr. 393-94, Christiansen Ex. 8.) Defendants do not even allege he was

substantively involved. They allege only that he is listed as a prosecuting attorney on the '121

patent and supervised the patent department personnel. This is not sufficient to trigger a duty to disclose material information.

Ampex does not dispute that Mr. Talcott was generally aware of AVA. Defendants present no evidence, however, that Mr. Talcott had any knowledge about AVA's creation, storage and retrieval of reduced-size images, much less "direct transfer." As with Messrs. Roth and Almeida above, Defendants try to impute that knowledge from the appearance Mr. Talcott's name as a prosecuting attorney on the '915 patent. For the reasons stated above, that is not a reasonable inference.

E.   Defendants Fail To Prove Intent

Intent to deceive cannot be inferred from materiality alone. *Purdue Pharma L.P., 438 F.3d* at 1134. Yet that is exactly what Defendants seek to do in this case. Defendants infer intent from their allegation that the non-disclosed information is "highly material." Defendants do not identify any facts probative of an intent to deceive, because there are no such facts. Defendants do not meet the burden of production, let alone the clear and convincing burden of proof.

As demonstrated above, Defendants' materiality argument is based entirely on a cropped quote. As the allegedly non-disclosed information would not have been material, there is no basis from which to infer intent.

Defendants attempt to infer intent from their unproven allegation that the attorneys who prosecuted the '121 patent knew about "direct transfer" ability and were "involved in" the prosecution of the '915 patent (only Mr. Roth had substantive involvement with the '915 patent). Defendants do not articulate any sound basis to infer intent from their allegation. As demonstrated above, Defendants cannot even prove knowledge from these facts.

Defendants apparently do not rely on any other facts to prove intent. Defendants attempt, however, to cast aspersions on Ampex with another misleading, incomplete quote. On page five of their brief, Defendants cite testimony from Ampex's expert Dr. George Ligler concerning a separate passage in the prosecution history – different than the passage on which they rely to support their non-disclosure claim – using the words "direct transfer." In that testimony, Dr. Ligler testified that it is technically "false" to state that "direct transfer" could mean transfer "without any other circuit therebetween," because it is not possible to transfer data from one block to another without at least some additional circuitry. Defendants failed to cite the complete testimony, which Ampex invites the Court to read. (Ligler 5/11/2006 Tr. 504-508, Christiansen Ex. 9.) Dr. Ligler made clear that he was commenting on the technical accuracy of the statement, not the intent of the Ampex patent agent, Mr. Almeida, who made it.

The cases on which Defendants rely to justify their inference of intent, *LaBounty Mfg. v. United States Int'l Trade Comm'n*, 958 F.2d 1066 (Fed. Cir. 1992) and *eSpeed v. Brokertec USA, L.L.C.*, 417 F. Supp. 2d 580 (D. Del. 2006), are inapposite. In *LaBounty*, intent was inferred where the allegedly withheld art could have been combined with cited art in an obviousness rejection. Defendants make no such claim here, because the allegedly withheld information does not add anything to the cited art. In *eSpeed*, the Court did not rely on mere materiality to infer intent. It found there were independent facts from which a conclusion of intent could be drawn, including the fact that the patent applicant in that case made affirmative misrepresentations to the Patent Office about the commercial availability of the withheld device.

Dan Beaulier, Greg Roth, George Almeida and Joel Talcott each understood their duty of candor, and they took their duty seriously. (Beaulier 7/24/05 Rebuttal Testimony, p. 2-3, Christiansen Ex. 3; Roth 5/16/05 Tr. 139:17-23, Christiansen Ex. 4; Almeida Tr. 5/17/05 60:14-

20, 37:19-22, 38:15-20, 40:23 - 41:8, 42:25-43:2, Christiansen Ex. 5.; Beaulier 3/22/05 Tr.

85:21-24, Christiansen Ex. 6; Talcott 3/17/05 Tr. 71:24-72:15, Ex. 10; Talcott 3/16/05 Tr. 10:9-

18, Ex. 11.) They disclosed what they believed to be the closest prior art, including the '776

patent and the description in Col. 1 of the '121 patent. They believe they met their duty, and by

any reasonable measure they did.

V.   CONCLUSION

The disputed issues of fact include:

1.   Did Ampex claim that the prior art in general did not disclose "direct transfer" of

information? (No.)

2.   Would a reasonable examiner have considered other, unrelated prior art "direct

transfer" ability relevant to determining whether the '776 patent taught direct transfer? (No.)

3.   Would a reasonable examiner have considered have considered AVA more

pertinent than the cited '776 patent? (No.)

4.   Does the AVA marketing literature use the term "direct transfer" was used in

AVA advertisement in the same way the term was used in the prosecution history of the '121

patent? (No.)

5.   Does AVA teach "direct transfer" as it used in the prosecution history? (No.)

6.   Does the prior art teach "direct transfer" as it used in the prosecution history?

(No.)

7.   Does AVA store reduced size images? (No.)

8.   Does AVA store and retrieve images in the same way as the '121 patent? (No.)

9.   Does the '915 patent teach "direct transfer" as that term was used in the '121

patent prosecution history? (No.)

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10.   Did Dan Beaulier know of AVA's capabilities with respect to size-reduction? (No.)

11.   Did Dan Beaulier know whether AVA could store reduced-size images? (No.)

12.   Did Dan Beaulier know how AVA stored and retrieved images? (No.)

13.   Did Dan Beaulier's work on AVA relate to anything other than an analog circuit board? (No.)

14.   Did Dan Beaulier use the AVA product to test his invention that lead to the '121 patent? (No.)

15.   Did Dan Beaulier have any reason to know that "direct transfer" was an issue in the prosecution of the '121 patent? (No.)

16.   Did Dan Beaulier have any reason to believe that "direct transfer" capability would have been material to the prosecution of the '121 patent? (No.)

17.   Did Dan Beaulier have any reason to believe that "direct transfer" capability or AVA should have been disclosed to the Patent Office? (No.)

18.   Did Dan Beaulier act with an intent to deceive the Patent Office? (No.)

19.   Did Greg Roth have any knowledge of AVA's size-reduction capability? (No.)

20.   Did Greg Roth know whether AVA could store reduced size images? (No.)

21.   Did Greg Roth know how AVA stored and retrieved images? (No.)

22.   Did Greg Roth have any reason to know that "direct transfer" was an issue in the prosecution of the '121 patent? (No.)

23.   Did Greg Roth have any reason to believe that "direct transfer" capability would have been material to the prosecution of the '121 patent? (No.)

24.   Did Greg Roth act with an intent to deceive the Patent Office? (No.)

25.   Did George Almeida have any knowledge of AVA's size-reduction capability?

(No.)

26.   Did George Almeida know whether AVA could store reduced-size images? (No.)

27.   Did George Almeida know how AVA stored and retrieved images? (No.)

28.   Did George Almeida have any reason to believe that "direct transfer" capability

would have been material to the prosecution of the '121 patent? (No.)

29.   Did George Almeida have any reason to believe that "direct transfer" capability or

AVA should have been disclosed to the Patent Office? (No.)

30.   Did George Almeida act with an intent to deceive the Patent Office? (No.)

31.   Was Joel Talcott substantively involved with the prosecution of the '121 patent?

(No.)

32.   Did Joel Talcott have any knowledge of AVA's size-reduction capability? (No.)

33.   Did Joel Talcott know how whether AVA could store reduced size images? (No.)

34.   Did Joel Talcott know how AVA stored and retrieved images? (No.)

35.   Did Joel Talcott have any reason to believe that "direct transfer" capability would

have been material to the prosecution of the '121 patent? (No.)

36.   Did Joel Talcott have any reason to believe that "direct transfer" capability or

AVA should have been disclosed to the Patent Office? (No.)

37.   Did Joel Talcott act with an intent to deceive the Patent Office? (No.)

In view of the above issues of fact, Defendants' motion for summary judgment should be

DENIED. Because Defendants' have not made out a prima facie case that either AVA or the

"direct transfer" ability of AVA is not cumulative to the cited art of record, the Court should

GRANT Ampex Corporation's Motion For Summary Judgment That U.S. Patent No. 4,821,121

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Is Not Unenforceable Due to Alleged Inequitable Conduct For Failure To Disclose The Quantel

DLS6000, Quantel PaintBox, Or Ampex AVA Systems (D.I. 283).).

Respectfully submitted,

Dated: June 13, 2006   MORRIS, NICHOLS, ARSHT & TUNNELL LLP

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